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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/000,485	12/04/2001	Osamu Tsujii	35.G2950	9623

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FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER	
HAMZA, FARUK	

ART UNIT	PAPER NUMBER
2155	

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/000,485	TSUJII ET AL.	
	Examiner	Art Unit	
	Faruk Hamza	2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) *25-30* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24 and 31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Response to Amendment

1. This action is responsive to the amendment filed on August 21, 2006. Claims 7-10,17 and 18 have been amended. Claims 25-30 have been withdrawn. Claim 31 has been newly added. Claims 1-31 are pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-4,12,14 and 20-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-4,12,14 and 20-21 recite, "adapted to". "adapted to" language suggests or makes optional but does not require steps to be performed nor limit a claim to a particular structure and thus does not limit the scope of a claim or claim limitation (see MPEM 2106 (II(C))). Therefore, the claim scope is open ended without meets and bounds and thus indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Fallon et al. (U.S. Patent Number 6,748,457) hereinafter referred as Fallon.

Fallon teaches the invention as claimed including data storage controllers employing lossless or lossy data compression and decompression to provide accelerated data storage and retrieval bandwidth (See abstract).

As to claim 1, Fallon teaches an information processing apparatus for processing a data stream inputted via a network, comprising:

an input unit adapted to input a data stream via a network (Column 24, lines 43-Column 26, lines 62, Fallon discloses input unit to input data stream);

an analysis unit adapted to analyze the data stream inputted via the input unit (Column 24, lines 43-Column 26, lines 62, Fallon discloses analyzing data stream);

a generation unit adapted to, in accordance with an analysis result made by the analysis unit, interrupt input of the data stream performed by the input unit and generate an interrupted stream from the data stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses generating interrupted data stream); and

an interrupted-stream storage unit adapted to store the interrupted stream generated by the generation unit, wherein in said analysis, at least one of a compression ratio, a signal-to-noise ratio, an amount of data, and a number of layers of said data stream is employed as an analysis condition (Column 24, lines 43-Column 26, lines 62, Fallon discloses storing interrupted stream).

As to claim 2, Fallon teaches an information processing apparatus according to claim 1, further comprising an output unit adapted to output the interrupted stream stored in the interrupted-stream storage unit, in response to a request for outputting the data stream (Fig. 9, Fig. 10).

As to claim 3, Fallon teaches an information processing apparatus according to claim 1, further comprising a setting unit adapted to set or update a reference value indicating said analysis condition of the analysis unit, wherein the analysis unit analyzes the data stream inputted by the input unit, with respect to

the reference value (Column 24, lines 43-Column 26, lines 62).

As to claim 4, Fallon teaches an information processing apparatus according to claim 3, further comprising an interrupt information storage unit adapted to store the reference value as interrupt information associated with the interrupted stream, wherein the analysis unit compares the reference value updated by the setting unit with the interrupt information and inputs a partial data stream following the interrupted stream via the input unit, in accordance with a comparison result, wherein the generation unit generates a new interrupted stream from the interrupted stream stored in the interrupted-stream storage unit and the partial data stream, and wherein the interrupt information storage unit stores the updated reference value as new interrupt information (Column 24, lines 43-Column 26, lines 62).

As to claim 5, Fallon teaches an information processing apparatus according to claim 4, wherein the output unit outputs the interrupt information together with the interrupted stream (Column 24, lines 43-Column 26, lines 62).

As to claim 6, Fallon teaches a method of controlling an information processing apparatus for processing a data stream inputted via a network, the method comprising:

an input step of inputting a data stream via a network (Column 24, lines 43-Column 26, lines 62, Fallon discloses input unit to input data stream);

an analysis step of analyzing the data stream inputted via the input step (Column 24, lines 43-Column 26, lines 62, Fallon discloses analyzing data stream);

a generating step of, in accordance with an analysis result made in the analysis step, interrupting input of the data stream in the input step and generating an interrupted stream from the data stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses generating interrupted data stream); and

an interrupted-stream storage step of storing, on a first storage medium, the interrupted stream generated in the generating step, wherein in said analysis, at least one of a compression ratio, a signal-to-noise ratio, an amount of data, and a number of layers of said data stream is employed as an analysis condition (Column 24, lines 43-Column 26, lines 62, Fallon discloses storing interrupted stream).

As to claim 7, Fallon teaches a method for controlling an information processing apparatus according to claim 8, further comprising an output step of outputting the interrupted stream stored in the interrupted-stream storage step, in response to a request for outputting the data stream (Column 24, lines 43-Column 26, lines 62).

As to claim 8, Fallon teaches a method for controlling an information processing apparatus according to claim 6, further comprising a setting step of setting or updating a reference value indicating said analysis condition in the analysis step, wherein the analysis step analyzes the data stream inputted in the input step, with respect to the reference value (Column 24, lines 43-Column 26, lines 62).

As to claim 9, Fallon teaches a method for controlling an information processing apparatus according to claim 8, further comprising an interrupt information storage step of storing, on a second storage medium, the reference value as interrupt information associated with the interrupted stream, wherein the analysis step compares the reference value updated in the setting step with the interrupt information and inputs a partial data stream following the interrupted stream via the input step, in accordance with a comparison result, wherein the generating step generates a new interrupted stream from the interrupted stream stored on the first storage medium in the interrupted-stream storage step and the partial data stream, and wherein the interrupt information storage step stores, on the second storage medium, the updated reference value as new interrupt information (Column 24, lines 43-Column 26, lines 62).

As to claim 10, Fallon teaches a method for controlling an information processing apparatus according to claim 9, wherein the output step outputs the

interrupt information together with the interrupted stream (Column 24, lines 43-Column 26, lines 62).

As to claim 11, Fallon teaches a computer-readable memory medium storing a program for implementing a method of controlling an information processing apparatus, the program comprising:

a program code of an input step of inputting a data stream via a network (Column 24, lines 43-Column 26, lines 62, Fallon discloses input unit to input data stream);

a program code of an analysis step of analyzing the data stream inputted via the input step (Column 24, lines 43-Column 26, lines 62, Fallon discloses analyzing data stream);

a program code of a generating step of, in accordance with an analysis result made in the analysis step, interrupting input of the data stream in the input step and generating an interrupted stream from the data stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses generating interrupted data stream); and

a program code of an interrupted-stream storage step of storing, on a first storage medium, the interrupted stream generated in the generating step, wherein in said analysis, at least one of a compression ratio, a signal-to-noise ratio, an amount of data, and a number of layers of said data stream is employed as an analysis condition (Column 24, lines 43-Column 26, lines 62, Fallon

discloses storing interrupted stream).

As to claim 12, Fallon teaches an information processing apparatus for processing a data stream inputted via a network, comprising:

an input unit adapted to input a data stream via a network (Column 24, lines 43-Column 26, lines 62, Fallon discloses input unit to input data stream);

an interrupted-stream storage unit adapted to store an interrupted stream generated by interrupting the data stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses generating interrupted data stream);

an interrupt information storage unit adapted to store interrupt information associated with the interrupted stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses storing interrupted information); and

an output unit adapted to output the interrupted stream stored in the interrupted-stream storage unit, in response to a request for outputting the data stream, wherein said interrupt information is at least one of a compression ratio, a signal-to-noise ratio, an amount of data, and a number of layers of said data stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses outputting interrupted stream).

As to claim 13, Fallon teaches an information processing apparatus according to claim 12, wherein the output unit inputs a partial data stream following the interrupted stream via the input unit (Column 24, lines 43-Column

26, lines 62).

As to claim 14, Fallon teaches an information processing apparatus according to claim 12, further comprising a setting unit adapted to set or update the interrupt information, wherein the output units inputs a partial data stream following the interrupted stream via the input unit, in accordance with the interrupt information updated by the setting unit, and generates a new interrupted stream from the interrupted stream stored in the interrupted-stream storage unit and the partial data stream (Column 24, lines 43-Column 26, lines 62).

As to claim 15, Fallon teaches an information processing apparatus according to claim 12, wherein the output unit outputs the interrupt information together with the interrupted stream (Column 24, lines 43-Column 26, lines 62).

As to claim 16, Fallon teaches a method of controlling an information processing apparatus for processing a data stream inputted via a network, the method comprising:

an input step of inputting a data stream via a network (Column 24, lines 43-Column 26, lines 62, Fallon discloses input unit to input data stream);

an interrupted-stream storage step of storing, on a first storage medium, an interrupted stream generated by interrupting the data stream (Column 24,

lines 43-Column 26, lines 62, Fallon discloses generating interrupted data stream);

an interrupt information storage step of storing, on a second storage medium, the interrupt information associated with the interrupted stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses storing interrupted information); and

an output step of outputting the interrupted stream stored on the first storage medium in the interrupted-stream storage step, in response to a request for outputting the data stream, wherein said interrupt information is at least one of a compression ratio, a signal-to-noise ratio, an amount of data, and a number of layers of said data stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses outputting interrupted stream).

As to claim 17, Fallon teaches a method for controlling an information processing apparatus according to claim 16, wherein the output step inputs a partial data stream following the interrupted stream, via the input step (Column 24, lines 43-Column 26, lines 62).

As to claim 18, Fallon teaches a method for controlling an information processing apparatus according to claim 16, further comprising a setting step of setting the interrupt information, wherein, in accordance with the interrupt information updated in the setting step, the output step inputs, via the input step,

a partial data stream following the interrupted stream and generates a new interrupted stream from the partial data stream and the interrupted stream stored on the second storage medium in the interrupted-stream storing step (Column 24, lines 43-Column 26, lines 62).

As to claim 19, Fallon teaches a computer-readable memory medium storing a program for implementing a method of controlling an information processing apparatus, the program comprising:

a program code of an input step of inputting a data stream via a network (Column 24, lines 43-Column 26, lines 62, Fallon discloses input unit to input data stream);

a program code of an interrupted-stream storage step of storing, on a first storage medium, an interrupted stream generated by interrupting the data stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses generating interrupted data stream);

a program code of an interrupt information storage step of storing, on a second storage medium, the interrupt information associated with the interrupted stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses storing interrupted information); and

a program code of an output step of outputting the interrupted stream stored on the first storage medium in the interrupted-stream storage step, in response to a request for outputting the data stream, wherein said interrupt

information is at least one of a compression ratio, a signal-to-noise ratio, an amount of data, and a number of layers of said data stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses outputting interrupted stream).

As to claim 20, Fallon teaches an information processing apparatus for processing a data stream inputted via a network, comprising:

an input unit adapted to input a data stream via a network (Column 24, lines 43-Column 26, lines 62, Fallon discloses input unit to input data stream);

an analysis unit adapted to analyze the data stream inputted via the input unit (Column 24, lines 43-Column 26, lines 62, lines 25, Fallon discloses analyzing data stream);

a generating unit adapted to, in accordance with an analysis result made by the analysis unit, interrupt input of the data stream via the input unit and generate an interrupted stream from the data stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses generating interrupted data stream);

an interrupted-stream storage unit adapted to store the interrupted stream generated by the generating unit (Column 24, lines 43-Column 26, lines 62, Fallon discloses generating interrupted data stream);

an interrupt information storage unit adapted to store interrupt information associated with the interrupted stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses storing interrupted information); and

an output unit adapted to output the interrupted stream and the interrupt information to an external apparatus connected to the network, wherein in said analysis, at least one of a compression ratio, a signal-to-noise ratio, an amount of data, and a number of layers of said data stream is employed as an analysis condition (Column 24, lines 43-Column 26, lines 62, Fallon discloses outputting interrupted stream).

As to claim 21, Fallon teaches an information processing apparatus according to claim 20, further comprising a setting unit adapted to set or update a reference value indicating said analysis condition of the analysis unit, wherein the analysis unit analyzes the data stream inputted via the input unit, with respect to the reference value (Column 24, lines 43-Column 26, lines 62).

As to claim 22, Fallon teaches a method of controlling an information processing apparatus for processing a data stream inputted via a network, the method comprising:

an input step of inputting a data stream via a network (Column 24, lines 43-Column 26, lines 62, Fallon discloses input unit to input data stream);

an analysis step of analyzing the data stream inputted via the input step (Column 24, lines 43-Column 26, lines 62, Fallon discloses analyzing data stream);

a generating step of, in accordance with an analysis result made in the analysis step, interrupting input of the data stream in the input step and generating an interrupted stream from the data stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses generating interrupted data stream);

an interrupted-stream storage step of storing, on a first storage medium, the interrupted stream generated in the generating step (Column 24, lines 43-Column 26, lines 62, Fallon discloses generating interrupted data stream);

an interrupt information storage step of storing, on a second storage medium, the interrupt information associated with the interrupted stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses storing interrupted information);

and an output step of outputting the interrupted stream and the interrupt information to an external apparatus connected to the network, wherein in said analysis, at least one of a compression ratio, a signal-to-noise ratio, an amount of data, and a number of layers of said data stream is employed as an analysis condition (Column 24, lines 43-Column 26, lines 62, Fallon discloses outputting interrupted stream).

As to claim 23, Fallon teaches a method for controlling an information processing apparatus according to claim 22, further comprising a setting step of setting a reference value indicating said analysis condition in the analysis step, wherein the analysis step analyzes the data stream inputted via the input step,

with respect to the reference value (Column 24, lines 43-Column 26, lines 62).

As to claim 24, Fallon teaches a computer-readable memory medium storing a program for implementing a method of controlling an information processing apparatus, the program comprising:

a program code of an input step of inputting a data stream via a network (Column 24, lines 43-Column 26, lines 62, Fallon discloses input unit to input data stream);

a program code of an analysis step of analyzing the data stream inputted via the input step (Column 24, lines 43-Column 26, lines 62, Fallon discloses analyzing data stream);

a program code of a generating step of, in accordance with an analysis result made in the analysis step, interrupting input of the data stream in the input step and generating an interrupted stream from the data stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses generating interrupted data stream);

a program code of an interrupted-stream storage step of storing, on a first storage medium, the interrupted stream generated in the generating step (Column 24, lines 43-Column 26, lines 62, Fallon discloses generating interrupted data stream);

a program code of an interrupt information storage step of storing, on a second storage medium, the interrupt information associated with the interrupted

stream (Column 24, lines 43-Column 26, lines 62, Fallon discloses storing interrupted information); and

a program code of an output step of outputting the interrupted stream and the interrupt information to an external apparatus connected to the network, wherein in said analysis, at least one of a compression ratio, a signal-to-noise ratio, an amount of data, and a number of layers of said data stream is employed as an analysis condition (Column 24, lines 43-Column 26, lines 62, Fallon discloses outputting interrupted stream).

As to claim 31, Fallon teaches a method for controlling an information processing apparatus according to claim 6, wherein the data stream being input in non-redundant hierarchy encoded data (Column 24, lines 43-Column 26, lines 62).

4. **Examiner's Note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in its entirety as potentially teaching of all or part of the claimed invention, as well as the context.

Response to Arguments

5. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faruk Hamza whose telephone number is 571-272-7969. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached at 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll –free).

Faruk Hamza

Patent Examiner

Group Art Unite 2155

SALEH NAJJAR
SUPERVISORY PATENT EXAMINER